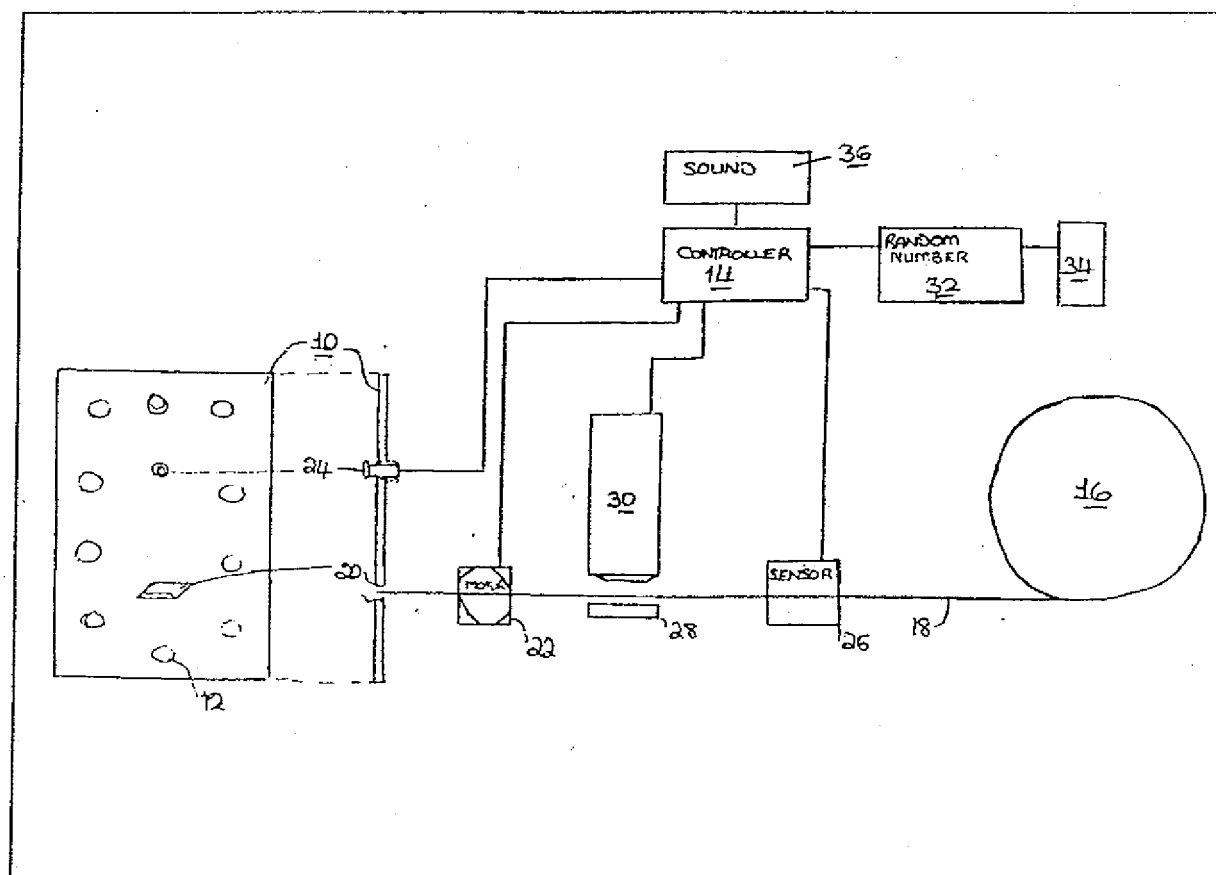


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 (71) Applicants
 Philip John Wells,
 The Old Vicarage,
 Clacton Road,
 St. Osyth,
 Essex.
 (72) Inventors
 Philip John Wells

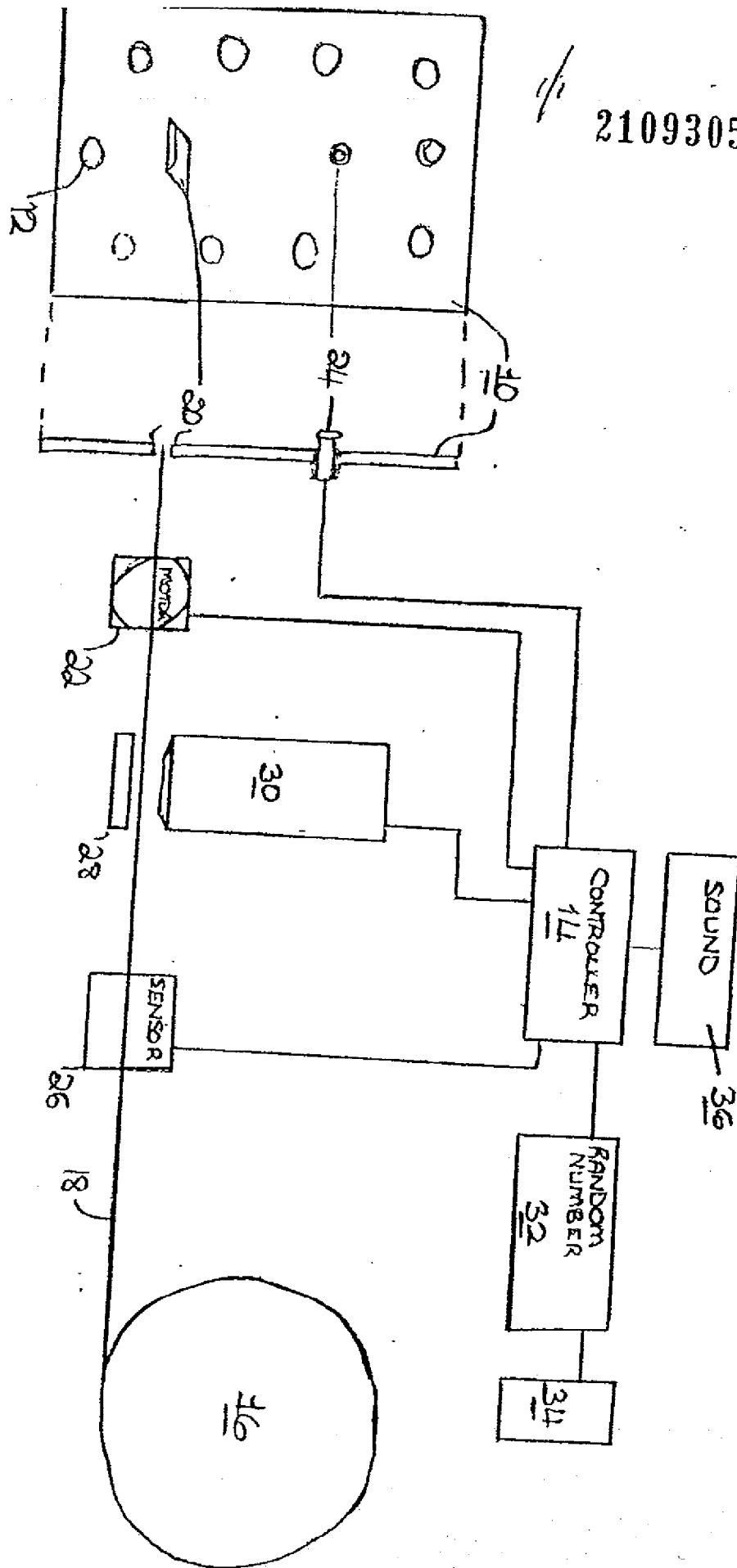
(54) Coupon dispensing machine

(57) The system dispenses coupons or vouchers or tokens from a pre-printed or plain roll 18 of perforated or unperforated coupons, Vouchers or tokens stored within or near the machine. The machine randomly stamps or otherwise marks at 30 selected ones of the tickets, vouchers, tokens etc being dispensed via the dispensing mechanism. The printing or marking indicates a winning ticket etc. One or more marks can be applied to the coupon etc and can be indicative of different values. Such marks are recorded together with other management information. The rate at which marks are applied can be pre-determined and programmed into the dispenser.



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SPECIFICATION

A machine for dispensing documents

5 The present invention relates to a machine for dispensing documents.

Throughout the specification the term "document" is used to refer to tickets, labels, vouchers, coupons or the like on paper, card or plastics or other material.

10 According to the present invention there is provided a machine for dispensing documents comprising a document outlet, means for feeding documents to said outlet, enabling means for actuating
15 said feeding means, and means for marking randomly selected documents prior to their being fed to the document outlet.

A machine of the invention may be used in retail outlets or the like to dispense a predetermined
20 number of vouchers, coupons, or the like to participating customers. Randomly selected vouchers may then be marked by said marking means to indicate that the customer has won a prize.

In an embodiment, said marking means comprises
25 a stamping member operable to impress or print an indication on a randomly selected document. The stamping member is actuated by a signal generated by a random number generator. The random number generator may be preset to actuate the stamping
30 member a predetermined number of times in a specified time period or to actuate the stamping member a predetermined number of times for a specified number of documents dispensed. Preferably, means are provided for adjusting the rate of
35 actuation of the stamping member. In addition, means may be provided for recording the number of actuations of the stamping member.

In an embodiment, said feeding means includes an electric motor arranged to be actuated by said
40 enabling means. The actuation of said electric motor may also be controlled by control means such that a predetermined number of documents are fed to said document outlet.

Said enabling means may comprise a coin or
45 token operated device. Alternatively, the enabling means may comprise manually operable means such as a lever or push button. Preferably, the manually operable means will be biased to its rest position in which the feeding means is not actuated.

50 In an embodiment, the documents to be dispensed are pre-printed onto a roll of paper which is perforated such that a plurality of individual tickets or vouchers are formed. Operation of the enabling means actuates the feeding means such that a
55 number of said tickets or vouchers are fed to the document outlet. Said control means may comprise a sensing device for sensing the presence of one or more markers on the documents and for generating a signal to disable the feeding means when a
60 predetermined marker or pattern of markers has been sensed. The sensing device may be adjustable such that the number of documents dispensed may be varied.

An embodiment of the present invention will
65 hereinafter be described, by way of example, with

reference to the accompanying drawing in which the Figure shows schematically a block diagram of a machine of the present invention.

The machine for dispensing documents shown in
70 the Figure has a casing (not shown) carrying a display panel 10. Advertising material or other artwork may be provided on the panel 10. In the illustrated embodiment a number of lamps 12 are provided and are arranged to flash on and off in a
75 predetermined sequence. If required, photographic slides (not shown) may be mounted in front of some or all of the lamps 12 such that the slides are periodically illuminated in predetermined sequence. The lamps 12 may be switched on and off by relays
80 (not shown) controlled either independently of the rest of the machine or by a central machine controller 14.

A roll 16 of paper is mounted within the casing. The paper is pre-printed and perforated such that a
85 number of individual documents such as coupons or vouchers are defined. A length 18 of the paper is wound off the roll 16 and is threaded through guide means (not shown) such that the leading edge is held adjacent an outlet 20 in the display panel 10.
90 The longitudinal edges of the paper are apertured or slotted in known manner and engaged by a sprocket drive gear (not shown) arranged to be driven by an electric motor 22.

A pushbutton 24 is mounted on the display panel
95 10 and is biased to its rest position by spring return means (not shown). Actuation of the pushbutton 24 against the action of the spring return means is arranged to operate the electric motor 22 by way of the controller 14. Accordingly, actuation of the
100 pushbutton 24 causes paper to be fed through the outlet 20. The paper fed through the outlet 20 may then be torn from the rest of the paper on the roll at the perforations.

The length of paper fed through the outlet 20 in
105 response to a single actuation of the pushbutton 24 is controlled by a sensing device 26 positioned adjacent the length 18 of paper within the casing. This sensing device 26 is arranged to switch off the electric motor 22 such that a predetermined length
110 of paper and/or a predetermined number of individual documents are fed through the outlet 20. For example, the sensing device 26 may comprise a transducer sensitive to magnetic or other markers provided at predetermined intervals along the paper.
115 The sensing device 26 then generates an output signal for disabling the motor 22 in response to the passage of one marker or a predetermined pattern of markers.

In one embodiment, each of the individual documents defined on the paper is marked by a marker to
120 which the sensing device 26 responds. The sensing device 26 includes a counter (not shown) which generates a signal for disabling the motor 22 when a predetermined number of individual documents
125 have been sensed.

The sensing device 26 may incorporate a photodiode and a photoelectric transducer. In this way, the sensing device 26 could be arranged to sense the
130 apertures provided along the longitudinal edges of the paper and/or the perforations defining the indi-

vidual documents. Alternatively, a mechanical sensing device could be provided responsive to said apertures and/or to said perforations in the paper.

The length 18 of paper is guided between a plate 5 28 and a vertically movable stamping member 30. The stamping member is operable to mark the paper beneath it. For example, the stamping member 30 may be arranged to impress the paper or to print onto the paper. The stamping member 30 is preferably electrically operated. It is operated by way of the controller 14 in response both to an electrical output signal generated by a random number generator 32 and to actuation of the push button 24. Accordingly, randomly selected ones of said individual documents are impressed, printed or otherwise marked by said stamping member 30 as they are moved therebeneath. Preferably, the random number generator 32 is adjustable so that the rate of actuation of the stamping member 30 can be chosen 20 as required. For example, the generator 32 may be set to actuate the stamping member 30 a predetermined number of times in a specified time period or for a specified length of paper or number of individual documents fed through the document 25 outlet. It will be appreciated that the rate of the generator 32 is an average rate and that it does not actuate the stamping member 30 at regular intervals.

Where the generator 32 is set to actuate the stamping member 30 a predetermined number of 30 times in a specified time period it may be that the pushbutton 24 has been actuated so infrequently during that time period that at the end thereof the random number generator 32 would generate an output signal in response to the next actuation of the 35 pushbutton 24. To prevent this a limiting device 34 may be provided and arranged to enable generation of the output signal only if the limiting device 34 takes up a predetermined position. The limiting device 34, which would become operational only if 40 the frequency of actuation of the pushbutton 24 fell below a predetermined value, would, for example, be arranged to give a 1:4 chance of an output signal being generated. The limiting device 34 could be a mechanical or an electrical device.

45 The machine may also incorporate a sound generating device 36 arranged to produce an audible indication of the operation of the pushbutton 24 and/or of the operation of the stamping member 30.

It will be appreciated from the above that actuation 50 of the pushbutton 24 causes a predetermined number of individual documents to be dispensed. These documents could comprise coupons, draw tickets, and/or other promotional material. In addition, randomly selected coupons are marked by the stamping 55 member, for example, to indicate that a prize has been won. Additional counters may be provided to count the number of times the pushbutton is actuated and/or to count the number of times the stamping member is actuated so that the operation 60 of the machine can be monitored.

The perforated roll of paper may be replaced by a stack of paper sheets. Additionally and/or alternatively the documents may be "peel off" labels provided on a backing sheet. The machine may also 65 be used to dispense cards of either board or plastics

material.

CLAIMS (Filed on 13 July 1982)

- 70 1. Philip John Wells of The Old Vicarage 73 Clacton Rd, St Osyth in the county of Essex England claim that the above invention is new because it allows the user or operator to programme the machine to stamp or otherwise mark one or a 75 plurality of coupons, vouchers, tickets or tokens with one or a plurality of marks or stamps which, may be, according to the programme set; indicative of different levels of value. Such marks are applied to the tickets, vouchers, coupons or tokens in a pseudo 80 random fashion or at a predetermined constant rate. Every such mark is recorded for later management information.

Such marks may be applied to pre-printed or plain perforated or unperforated rolls of coupons, 85 vouchers, tickets, or tokens or can be applied to the said coupon, vouchers, tickets or tokens being fed through the dispensing or stamping mechanism in sheet form or other forms.

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